

IN THE CLAIMS:

The following is a complete listing of the claims.

1.-35. (Canceled)

36. (Previously Presented) An insertion set for use with infusion tubing having a connector with at least one recess on the connector adapted for coupling the infusion tubing to the insertion set, wherein the infusion tubing is adapted for delivering fluid through the connector to the insertion set, the insertion set comprising:

a mounting base adapted for mounting onto a patient's skin, wherein the mounting base includes at least one resilient latch arm projecting from the mounting base and adapted for releasable engagement with the at least one recess on the connector; and

a cannula coupled to the mounting base, wherein the cannula has a distal end protruding from the mounting base, and the cannula includes at least one lumen in fluid communication with the infusion tubing for transcutaneously delivering fluid from the connector through the mounting base to the patient.

37. (Previously Presented) The insertion set of claim 36, wherein the mounting base includes a pair of resilient latch arms rearwardly projecting from the mounting base and adapted for snap-fit, releasable engagement with a pair of recesses on the connector.

38. (Previously Presented) The insertion set of claim 36, further comprising an insertion needle having a distal end protruding from the mounting base, wherein the insertion needle is slidably engaged with the cannula, and the insertion needle is adapted for transcutaneously carrying the cannula to a selected insertion site and being withdrawable from the mounting base after the cannula is placed at the selected insertion site.

39. (Previously Presented) The insertion set of claim 38, wherein the insertion needle surrounds the cannula.

40. (Previously Presented) The insertion set of claim 36, wherein the cannula further includes at least one lumen for receiving at least a portion of a flexible sensor therein, the sensor having a distal segment protruding from the mounting base with at least one sensor electrode thereon.

41. (Previously Presented) The insertion set of claim 36, wherein the at least one lumen of the cannula is also adapted for withdrawing fluid from the patient.

42. (Previously Presented) The insertion set of claim 36, further comprising an adhesive patch attached to an underside surface of the mounting base for placement onto the patient's skin.

43. (Previously Presented) An insertion set for use with infusion tubing having a connector with a pair of recesses on the connector adapted for coupling the infusion tubing to the insertion set, the insertion set comprising:

- a mounting base adapted for mounting onto a patient's skin, wherein the mounting base includes a pair of resilient latch arms projecting from the mounting base and adapted for releasable engagement with the pair of recesses on the connector;

- a cannula coupled to the mounting base, wherein the cannula has a distal end protruding from the mounting base and adapted for transcutaneous placement at a selected insertion site;

- an insertion needle having a distal end protruding from the mounting base, wherein the insertion needle is slidably engaged with the cannula, and the insertion needle is adapted for transcutaneously carrying the cannula to the selected insertion site and being withdrawable from the mounting base after the cannula is placed at the selected insertion site; and

- an adhesive patch attached to an underside surface of the mounting base for placement onto the patient's skin.

44. (Previously Presented) The insertion set of claim 43, wherein the cannula further includes at least one lumen in fluid communication with the infusion tubing for transcutaneously delivering fluid from the connector through the mounting base to the selected insertion site.

45. (Previously Presented) The insertion set of claim 43, wherein the cannula further includes at least one lumen for receiving at least a portion of a flexible sensor therein, the sensor having a distal segment protruding from the mounting base with at least one sensor electrode thereon.

46. (Previously Presented) The insertion set of claim 43, wherein the cannula further includes at least one lumen for withdrawing fluid from the patient.

47. (Previously Presented) The insertion set of claim 43, wherein the insertion needle surrounds the cannula.

48. (Previously Presented) An insertion set, comprising:  
a mounting base adapted for mounting onto a patient's skin;  
infusion tubing adapted for delivering fluid to the patient, wherein the infusion tubing includes a connector adapted for coupling the infusion tubing in fluid communication with the mounting base; and  
a cannula coupled to the mounting base, wherein the cannula has a distal end protruding from the mounting base and adapted for transcutaneous placement at a selected insertion site, and the cannula is in fluid communication with the infusion tubing for transcutaneously delivering fluid from the connector through the mounting base to the selected insertion site;  
wherein the connector includes at least one recess, and the mounting base includes at least one resilient latch arm projecting from the mounting base and adapted for releasable engagement with the at least one recess on the connector.

49. (Previously Presented) The insertion set of claim 48, wherein the mounting base includes a pair of resilient latch arms rearwardly projecting from the mounting base and adapted for snap-fit, releasable engagement with a pair of recesses on the connector.

50. (Previously Presented) The insertion set of claim 48, further comprising an insertion needle having a distal end protruding from the mounting base, wherein the insertion needle is slidably engaged with the cannula, and the insertion needle is adapted for transcutaneously carrying the cannula to the selected insertion site and being withdrawable from the mounting base after the cannula is placed at the selected insertion site.

51. (Previously Presented) The insertion set of claim 50, wherein the insertion needle surrounds the cannula.

52. (Previously Presented) The insertion set of claim 48, wherein the cannula further includes at least one lumen for receiving at least a portion of a flexible sensor therein, the sensor having a distal segment protruding from the mounting base with at least one sensor electrode thereon.

53. (Previously Presented) The insertion set of claim 48, wherein the at least one lumen of the cannula is also adapted for withdrawing fluid from the patient.

54. (Previously Presented) The insertion set of claim 48, further comprising an adhesive patch attached to an underside surface of the mounting base for placement onto the patient's skin.

55. (Previously Presented) An insertion set for use with infusion tubing having a connector with a pair of recesses on the connector adapted for coupling the infusion tubing to the insertion set, wherein the infusion tubing is adapted for delivering fluid through the connector to the insertion set, the insertion set comprising:

    a mounting base adapted for mounting onto a patient's skin, wherein the mounting base includes a pair of resilient latch arms projecting from the mounting base and adapted for releasable engagement with the pair of recesses on the connector;

    a cannula coupled to the mounting base, wherein the cannula has a distal end protruding from the mounting base and adapted for transcutaneous placement at a selected insertion site, and the cannula includes at least one lumen in fluid communication with the infusion tubing for transcutaneously delivering fluid from the connector through the mounting base to the selected insertion site;

    an insertion needle having a distal end protruding from the mounting base, wherein the insertion needle surrounds the cannula, and the insertion needle is adapted for transcutaneously carrying the cannula to the selected insertion site and being withdrawable from the mounting base after the cannula is placed at the selected insertion site; and

    an adhesive patch attached to an underside surface of the mounting base for placement onto the patient's skin.

56. (Previously Presented) The insertion set of claim 55, wherein the at least one lumen of the cannula is also adapted for withdrawing fluid from the patient.

57. (Previously Presented) The insertion set of claim 55, wherein the cannula further includes at least one lumen for receiving at least a portion of a flexible sensor therein, the sensor having a distal segment protruding from the mounting base with at least one sensor electrode thereon.

58. (Previously Presented) An insertion set, comprising:  
a mounting base adapted for mounting onto a patient's skin;  
infusion tubing adapted for delivering fluid to the patient, wherein the infusion tubing includes a connector adapted for coupling the infusion tubing in fluid communication with the mounting base;  
a cannula coupled to the mounting base, wherein the cannula has a distal end protruding from the mounting base and adapted for transcutaneous placement at a selected insertion site, and the cannula is in fluid communication with the infusion tubing for transcutaneously delivering fluid from the connector through the mounting base to the selected insertion site;  
an insertion needle having a distal end protruding from the mounting base, wherein the insertion needle surrounds the cannula, and the insertion needle is adapted for transcutaneously carrying the cannula to the selected insertion site and being withdrawable from the mounting base after the cannula is placed at the selected insertion site; and  
an adhesive patch attached to an underside surface of the mounting base for placement onto the patient's skin;  
wherein the connector includes a pair of recesses, and the mounting base includes a pair of resilient latch arms rearwardly projecting from the mounting base and adapted for snap-fit, releasable engagement with the pair of recesses on the connector.

59. (Previously Presented) The insertion set of claim 58, wherein the at least one lumen of the cannula is also adapted for withdrawing fluid from the patient.